

PREVENTION \* LAW ENFORCEMENT \* RESEARCH

# Maine Fire Marshal News

Maine State Fire Marshal's Office • Fire Research  
Maine Department of Public Safety  
Fire Marshal's Web Page

September 2010

Fall 2010 Vol. 2, Issue No. 7

## WELCOME!

Welcome to the fall 2010 issue of the Maine Fire Marshal News. Please take some time to read the newsletter and send us your own article for a future publication or comments in general. As always, we do appreciate the feedback on the newsletter many of you have sent over the past few years and look forward to hearing from you more in the future.



### A MESSAGE FROM THE FIRE MARSHAL

Diminishing local and state budgets, Fire Prevention Week, and cold weather fire issues. What do they have in common? I'm concerned that as we enter that time of the

year in which we see some of our worse fires, the fire service may not be able to conduct as much fire prevention education during fire prevention week as we might have in better times.

This is the time of year students' return to our public and private institutions of higher learning. However, recent student housing fires

in California, Indiana, New York and Michigan have cut short the lives of some students. Many others have been injured. The bulk of the loss has taken place in off-campus housing though some fires have also occurred in fraternities and even dormitories. September has been proclaimed Campus Fire Safety Month by Governor Baldacci. Encourage your child, their friends and others to make sure the housing they choose has adequate smoke detection, escape route notification and sprinkler systems where required. And remember to tell them of the very real and unfortunate direct correlation between alcohol consumption and injury. Help make it a solid learning experience and not the school of hard knocks.

Along with the college students Maine's K – 12 students are back at work in their respected community schools. For the elementary level students we hope this fall will also include some lessons in fire prevention and safety. I'm happy to report our office will provide such services at six locations in Maine, during Fire Prevention Week, where the local fire department is unable to do so.

Fall is a particularly good time to present such programming in our schools. With the colder weather settling in Maine citizens will be spending more time indoors and begin using heating appliances. We certainly hope that people have had their oil furnaces and chimneys inspected and cleaned if necessary and done the same for their wood and pellet stoves. For those planning to use alternative heating sources such

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as portable electric heaters now is the time to rearrange the rooms so as to provide the essential space these appliances require (3 ft!). For more information on heating safety go to [maine.gov](http://maine.gov) and search for *heating safety*. That will bring you to our site on heating safety.

Now is also the time to be ready to replace the batteries in all our smoke detectors and refresh our memories as to how we, and our family members, will escape a fire should one occur. For those who still smoke, see if you can smoke outdoors or in the kitchen using a deep astray on a sturdy surface.

What makes Fire Prevention Week so great is the opportunity it gives us in the fire service to talk to children about these issues. We can be effective by providing them with a good presentation using illustrations, games, demonstrations, and other methods appropriate to the given audience. In so doing, we believe that we can send forward another generation of people aware of fire prevention strategies. The children too will often teach their parents. A child who learns that smoke detectors should be in every bedroom, on each level of the home, and in the basement, is likely to ask mom and dad where they are if they are not in their home.

This is why I'm concerned about budget shortfalls at this time. I think the Maine fire service has done well in going to schools during fire prevention week but when money is not available it makes such activities more difficult. It is said "That there is no time like the present" and this is particularly true of Fire Prevention Week when you consider the time of year in which it is held.

I wish all of Maine's fire service a successful Fire Prevention Week and encourage you to share with us any activities you have undertaken that you believe are particularly effective in educating Maine children about all potential dangers they face at home and elsewhere.

Finally, I wish all of Maine's citizens and the visiting public a happy and safe fall season.

Sincerely,



John C. Dean  
Fire Marshal

## **SOME UNINTENDED BENEFITS OF COMMUNITY FIRE SERVICE WORK**

By Richard E. Taylor, Sr. Research and Planning Analyst

In many European countries the fire service has made community fire prevention programs a line service, as opposed to a support service. Many fire departments in the United States and Maine, have done likewise. A popular model used is to canvass an area, find out where smoke alarms are missing, and install them. This approach has yielded unintended benefits.

Fire service personnel nationwide are discovering such unsafe oddities as an electrical panel wired with tin foil. The panel was in a house and the owner stated the lights "flickered" a lot. The house was occupied by two parents and five children all under the age of 8. Another problem firefighters have encountered is simply the amount of clutter in some homes. In one instance I read about it was believed that even if the house had smoke alarms people would have been unable to get out absent, at minimum, injuries due to falling.

A classic, and unfortunate discovery, is the ongoing problem of misused extension cords. Despite the Consumer Products Safety Commission's continued recommendation to only use extension cords on a temporary basis, some are finding that they've become a permanent fixture. They are also run out in the open where they pose a tripping threat but also under carpets where they can, and do, start fires when the cord gets worn down to the wire. In addition, cords out in the open are frequently of interest to children who put them in their

mouth and are burned.

The reports and stories, as I'm sure most can imagine, go on and on. However, the good news is that this gives these fire service people and opportunity to help people in their community with simple recommendations and some easy assistance. Some have called local programs that provide assistance to needy populations and bring the issue to their attention. In the long run it really makes the fire service look good. It makes them look like something more than a bunch of guys who just put out fires. It brings them into to the neighborhood and augments the public value of the department. Done routinely, as is being done now in Europe, this sort of action could really benefit fire departments in Maine and around the country.

## **SPRINKLERS AND WATER DAMAGE**

By Richard E. Taylor, Sr. Research and Planning Analyst

Though I believe, or hope, that even the most adamant opponent of fire sprinklers knows now that they do not use or cause as much water damage as traditional means of fire suppression, I couldn't help but be intrigued by this study on...water damage.

The Travelers Insurance Company recently reviewed their claims data and came up with some interesting findings. First, a home is "10 times more likely to be damaged by water than by fire." In fact, damage caused by water accounted for 28% of property claims in the study compared to 3% for fire. I guess that's a good thing from a fire service perspective providing sprinklers are not the culprit of this damage. I'm happy to say they are not.

Ironically weather only accounted for 5% of water damage according to the review of claims data. A spokesman for Travelers stated



<http://www.smokefreeforme.org/>

that poor maintenance of household systems is the likely cause. Travelers goes on to recommend that hoses from washing machines need to be inspected annually and replaced every 5 years. Plumbing around water heaters needs to be inspected for signs of leakage and/or corrosion. They also recommend that water heaters be installed in an area with floor drains. Look for leaks from refrigerator icemaker connections which are tough because they're behind the behemoth machine. These connections may need replacement as well. Finally, drain lines from air conditioning units need to be checked so that they are clog free. These recommendations reflect what Traveler's found to be the top four common causes of water damage in a typical home.

Two points of interest. First, nowhere mentioned in the report were sprinkler systems. Then again not as many homes have sprinklers as we'd like. Second, all the talk and worry over inspection and maintenance of sprinklers in so few homes might be better focused on the systems most Americans already have in their homes. These are, according to the Travelers, quite costly but no one is opposing ice makers or water heaters!!!



[www.homefiresprinkler.org](http://www.homefiresprinkler.org)

## **PROFILES**

By Richard E. Taylor, Sr. Research and Planning Analyst

This is a new section of the newsletter focused on individual staff members of the Fire Marshal's Office and others in Maine's fire service. The first person I'd like to write about is State Fire Marshal's Office Inspector Mark Stevens of Oakland, Maine.

Mark's public service background is considerable. He came to the Fire Marshal's Office in 2007 after working for a year with the State Bureau of Identification and his emergency service background includes 16 years of service as a volunteer firefighter for both the Waterville and Oakland fire departments. Mark is also a certified emergency medical technician.

At the Fire Marshal's Office Mark conducts fire inspections at various DHHS licensed facilities, i.e. day care centers and home day care facilities. In the short time he's been here, Mark has shown an impressive and successful effort to advance his knowledge of fire mitigation/protection systems in all types of occupancies and facilities.

Mark earned a National Fire Protection Association (NFPA) Fire Inspector I and II certification (CFI - I & II). In addition, Mark is the only member of the Fire Marshal's Office who is certified by the NFPA as a Fire Protection Specialist (CFPS). The CFPS program benefits facility managers, asset managers, architects, safety personnel, fire service professionals, code officials, fire protection engineers, operations managers, and loss prevention specialists and others. It is really designed to take into account a given facilities physical and behavioral environment and what systems will best reduce fire losses and associated costs should the facility experience a fire. On top of these certifications Mark is also studying at Southern Maine Community College to earn his degree in Fire Science.

Mark's focus on public safety is not isolated to fire alone. Since he joined the staff at the Fire Marshal's Office he's shown an ongoing

willingness and enthusiasm to learn about the other inspections services the Fire Marshal's Office is required to carry out under law. Such inspections would include amusement park rides as well as racing track structures with the focus being to protect the public from vehicles involved in competitions. Both the amusements and car racing areas have required that Mark become familiar with, and be able to apply, various nationally recognizes standards such as ASTM standards for amusement rides.

What has been most impressive about Mark has been his understanding that in the fire service you must understand and be able to apply engineering, enforcement, *AND* Education approaches if you're really going to make a difference. Every Fire Prevention Week in October Mark will do fire prevention and safety presentations to children of varying ages in Maine on behalf of the Fire Marshal's Office. When he's done with that he does the same for the Oakland Fire Department as well.

Mark is not just a talker when it comes to fire prevention and safety. In fact, Mark is the only fire service person I know in Maine who has retrofitted into his own home a fire sprinkler system. This demonstrates his very real understanding of the value of fire mitigation systems.

"Mark is the only fire service person I know in Maine who has retrofitted into his own home a fire sprinkler system."



Mark (pictured above) lives in Oakland with his wife Tanya, children James and Katie. He enjoys hunting, fishing, and history.

## MEFIRS – Maine Fire Incident Reporting System

	Current Statistics 2010*	Final Statistics for 2009
Total Calls:	26,712	78,221
Fire Calls:	1,484	3,809**
EMS Calls:	16,943	50,996
All others:	8,285	23,416
Fire Departments Reporting	129	190
Total Fire Dollar Loss	\$11,677,656	\$39,788,836
Civilian Fire Related Injuries	23	40
Fire Service Fire Related Injuries	10	30
Civilian Fire Related Deaths	4***	14***
Fire Service Fire Related Deaths	0***	1***

\* The Fire Marshal's Office will have all data for 2010 in by June-July of 2011.

\*\* Represents single incidents only.

\*\*\* Based on SFMO Investigations

**We now have been providing you with summary incident type data by year since 2007. Here is how the numbers stack up year-to-year.**

	<u>2007</u>	<u>2008</u>	<u>2009</u>
<b>Total Calls:</b>	<b>84,106*</b>	<b>71,667</b>	<b>78,221</b>
<b>Fire Calls:</b>	<b>5,601*</b>	<b>3,531</b>	<b>3,809</b>
<b>EMS Calls:</b>	<b>51,843*</b>	<b>43,086</b>	<b>50,996</b>
<b>All others:</b>	<b>26,662*</b>	<b>23,815</b>	<b>23,416</b>
<b>Fire Depts. Reporting:</b>	<b>200</b>	<b>181</b>	<b>190</b>
<b>TL Fire Dollar Loss:</b>	<b>\$30.8 million</b>	<b>\$31.2 million</b>	<b>\$39.8 million</b>
<b>Civilian Fire Injuries:</b>	<b>60</b>	<b>42</b>	<b>40</b>
<b>Fire Service Fire Inj.:</b>	<b>45</b>	<b>22</b>	<b>30</b>
<b>Civilian Fire Death:</b>	<b>12</b>	<b>14</b>	<b>14</b>
<b>Fire Service Fire Death:</b>	<b>2</b>	<b>0</b>	<b>1</b>

\* This reflects total incidents as opposed to total calls.

As you can see with roughly the same number of (and same FDs) fire departments reporting, the numbers appear to be consistent. Fire deaths remained low at a rate of .9 to 1 per 100,000 people. As we have seen nationally however, the numbers in terms of total fire dollar loss continue to rise though fatalities, injuries, and the fire count itself decline or remain steady. Obviously three years doesn't give us a valid trend but given the number of departments providing data and the number of citizens they serve, this data combined with data going back to 2004 should give us a pretty good baseline. 2004 – 2009 have been good years in terms of the number of department reporting and the cumulative population they served.

Take a look at this report of Fire Department Information for 2009 at the url below. It provides information on whose reporting as well as the dollar loss they are seeing. How does your department stack up to others of a comparable size and demographic composition? Look at the dollar loss figures.

<http://www.maine.gov/dps/fmo/research/incidents.html>

***“Fight Fire with Facts”***



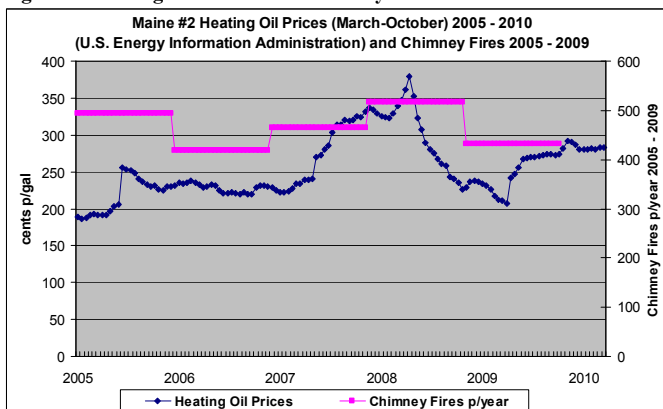
# CHIMNEY FIRES IN MAINE

By Richard E. Taylor, Sr. Research and Planning Analyst

In 2008 we wrote about the concerns some were expressing with regard to rising heating oil prices and how that might lead to more alternative heating appliance use and potentially fires. We wondered if we might also see a corresponding rise in chimney related fires particularly in 1 & 2 family residential occupancies. Here's what we found actually happened.

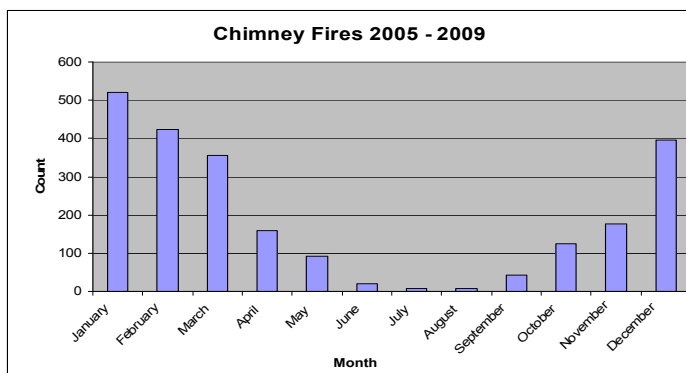
Beginning in 2005 residential # 2 heating oil prices crossed over into the \$2.00 per gallon range and remained that way peaking at \$3.79 in March of 2008. The average price during the October to March heating season for the past five years combined was \$2.56.

Figure 1: Heating Oil Prices and Chimney Fires



Generally the trend on heating oil prices since 2005 has been upward. The general trend on chimney fires has been downward. Figure 1 above appears to show a corresponding rise and decline between the two events. I do not have data, unfortunately, on actual woodstove use. Certainly the seasonality of chimney fires, most

Figure 2: Chimney Fires by Month



often tied to wood stoves, is well established (see figure 2 below left). You can see that December through March are the worst months for these events.

Because chimney fires in 1 & 2 family dwellings has remained in the lower four-hundred to lower five-hundred frequency range but trended downward I don't believe our worst fears were realized. This may be due to a lot of public service announcements put out by fire service organizations and the fact that realtors now mention chimney fires and chimney inspections in the buyer's transactions booklets they give away as well as in disclosure forms. The Maine Cooperative Extension also focused on this issue. Perhaps the combined efforts of these organizations had an impact.

The rise and decline of chimney fires and oil prices we see in figure 1 is still compelling but insufficient to make a conclusion absent additional research. However, the fact that chimney fires are declining is certainly good news. Let's just hope that the peak heating oil price we reached in 2008 is not duplicated.

## VISION 20/20 MODEL PERFORMANCE FIRE PREVENTION SYMPOSIUM

By Peter S. Cuter, Sanford/Springvale Fire Marshal

After attending the Model Performance Fire Prevention Symposium in Maryland, sponsored by Vision 20/20, I'd like to share with you some of the main points emphasized at the event.

The two major points made were with reference to the importance of evaluating our fire prevention efforts and using data to drive our code enforcement and fire prevention education efforts. Why focus on these two points?

The US continues to rank among the top five industrialized countries for fire injury and death. This is why more attention keeps being placed upon Code Enforcement and Fire

**Prevention. “People are People, and they don’t know what they don’t know.” I laughed when the speaker said that, with his southern accent.**

**However, when he went on to explain what was meant by that, it made sense. We can enforce and inspect 24/7 but without EXPLAINING to folks what the issues are and helping them to understand the reasons why we do what we do, they will never “know what they don’t know”.**

**So, when pondering what our core purpose is (which is saving people’s lives from fire) ask yourself: Are we doing it right / Are we doing the right thing? To answer these questions we must evaluate what we are doing with regards to educating the citizen. Then, improve the areas that are needed. The State of Maine is below the national average for fires per capita, but as far as loss in dollars and fire injury, these items need attention. Fire from cooking mishaps accounts for the majority of the fires. The high-risk groups continue to be the elderly and young.**

**Residential Sprinklers were placed in the 2009 ICC codes. Unfortunately, the Maine Uniform Building & Energy Codes board voted against incorporating them into Maine’s building code. During the conference, several success stories were shared about overcoming political pressures as well as professional organizations and their objections.**

**Some of the more interesting statistics discussed during the symposium included how 95% of fires controlled buy a single sprinkler head saves a structure even though it is not designed to. ISO ratings for communities that mandated sprinklers saw a 21% rate drop.**

**Sprinklers are the ultimate fire prevention action one can take. Smoke Detectors only alert the occupants, and only work when they have not been disabled and are working. If we cannot get sprinklers in houses, then we need to focus on what we do have, which is good laws on Smoke and Carbon Monoxide Detectors. Can we take a**

**few minutes between calls or in our down time and conduct “home safety surveys”? The programs showed that over 50% of dwellings do not have working smoke detectors. It was agreed that sprinklers are less maintenance than smoke detectors, and have a higher life safety factor, however smoke detection is easier and cheaper to install (and in Maine we have laws regarding smoke detectors).**

**The last item that I wanted to mention is that we all can have a part in fire prevention and education. You may say, “I don’t have time” or “I’ll let Chief (or another appropriate person) know and THEY can follow up” or even “I am a firefighter! I don’t do that stuff”. Why not take two seconds when you are in their house on a call and look at the ceiling for detectors. Talk to the citizen about why they may need to make a change. When we are there with a truck and uniforms we are in a unique situation - they tend to listen better. We have the ability to save people before they call 911. Reach out to the citizen. Reach out the new and younger firefighters. Change the way we traditionally think, and we will see the fruits of our labor, proven by statistics.**

**“Why not take some time when you are in their house on a call and look at the ceiling for detectors?”**

## **MAINE FIREWATCH**

**By Richard E. Taylor, Sr. Research and Planning Analyst**

**The following are some fires that occurred in Maine since this newsletter was last published last June.**

**A teenage girl managed to scoop up her three little brothers and get them out of a house on fire in Deer Isle this past August. She then called 911 and the fire department responded. Though the house was a total loss the girls actions are exemplary. The fire started in a bedroom late in the afternoon. At the time the fire broke out the teenage girl was taking care of the boys.**

Fire destroyed an old navy housing structure on Liberty Circle in Topsham (see photo below). The fire started about 11:00 PM and required two alarms. This fire, which started in a detached carport, was a case of arson leading to an arrest.



Brunswick Naval Air Station Fire in Topsham

A fire destroyed the second floor of the Big Apple Convenience Store in Corinna in August. Fortunately, no customers were in the store at the time and the manager of the store did escape unharmed. The fire took place in the middle of the afternoon and fire departments from Dexter, Newport, Detroit, and St. Albans joined the Corinna department to put the blaze out.



Corinna Big Apple Fire

August came to a roaring close with a fast moving fire that destroyed two buildings in East Machias. The buildings were being used to store blueberry harvesting equipment and other tools. Both buildings were completely destroyed despite the best efforts of the Machias and Marshfield fire departments who joined the Maine Forest Service and East Machias volunteers.



East Machias Fire Photo by BDN Sharon Mack

Maine has had only five fire fatalities this year.

### This Month in Fire History

Middle of five-day Great Fire of London, England, 1666  
World Trade Center attack kills 2,666, New York 2001  
First sprinkler system patented by P.W. Pratt, 1872  
Yell of "fire" in church causes 100+ to be trampled to death, Birmingham (AL), 1902  
Nursing home fire kills 14, Nashville (TN), 2003  
Conflagration destroys 386 buildings, kills 13, Bandon (OR), 1936  
Dwelling fire kills 12, Milwaukee (WI), 1987  
New Royal Theatre fire kills 186, England, 1887  
Ponet Square Hotel fire kills 19, Los Angeles (CA), 1970





## UPCOMING EVENTS & ANNOUNCEMENTS

*If you have an announcement or upcoming event you'd like to post in this newsletter please feel free to forward it to us using the contact information below. The next issue will be in December 2010.*



**Juvenile Firesetter Interviewing I & II**  
**Sponsored by the Office of the State Fire Marshal**  
**September 29 & 30**  
**8:30 – 4:30**  
**Conference Room**  
**Career Center**  
**66 Spruce Street**  
**Presque Isle, Maine**

For more information go to our website and look under “News and Events” “Juvenile Firesetter Interviewing” at <http://www.maine.gov/dps/fmo/index.htm>



**22<sup>nd</sup> Annual Fire & Life Safety Education Conference**

**“Teaching Today For A Safer Tomorrow”**

**October 15<sup>th</sup> – 16<sup>th</sup>**  
**Ramada Inn and Conference Center**  
**(formerly Holiday Inn Express in Saco, Maine)**

For more information go to: <http://ptbf.org/>



**Maine Fire Chief's Annual Meeting**  
**October 27<sup>th</sup> – 29<sup>th</sup>**  
**Marriot Portland at Sable Oaks**  
**200 Sable Oaks Drive**  
**South Portland, Maine**

For more information go to:  
<http://www.mainechief.com/>

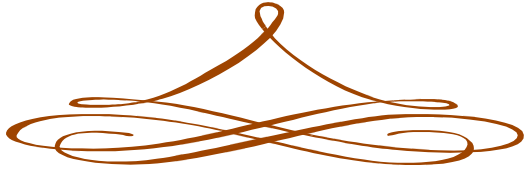
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**International Fire & Police Winter Games**  
**At Sunday River**  
**January 16 – 21, 2011**

Events include: Giant Slalom, slalom, snowboarding, firefighter team hose race, snowshoeing, cross country, hockey and curling.

For reservations contact:  
**International Fire & Police Winter Games**  
**21 Baldwin Terrace**  
**Rumford, ME 04276**  
**(207) 357-5687**  
[www.ifpwg.com](http://www.ifpwg.com)



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To submit articles for publication contact the Fire Marshal's Office at (207) 626-3870 and ask to speak with the editors. You may also e-mail an article or comment to [Richard.e.taylor@maine.gov](mailto:Richard.e.taylor@maine.gov)

All articles are subject to an editorial staff review prior to inclusion. For a copy of submission requirements contact the editorial staff.

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